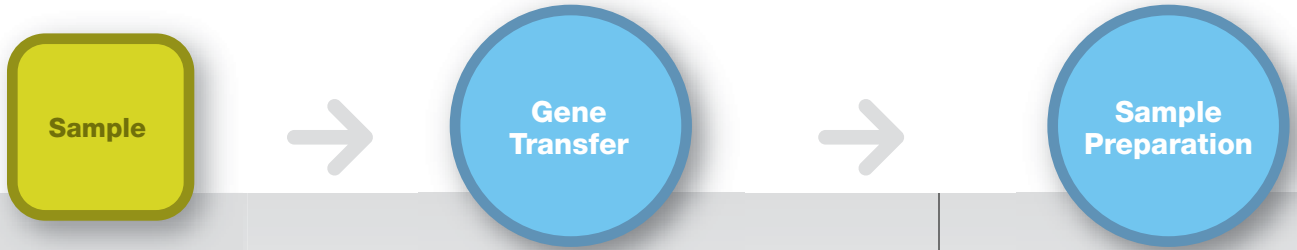


Life Science Research
Gene Modulation



Gene Modulation



Description

Transformation of plant, animal, or bacterial cells with recombinant DNA or RNA via chemical transformation, electroporation, or biolistic particle delivery

Purification of nucleic acid and/or protein from cells

Applications

- Lipid-mediated modulation and protein and lipid profiling
- Lipid-mediated modulation and nucleic acid profiling
- Electroporation and protein and lipid profiling
- Electroporation and nucleic acid profiling
- Biolistic particle delivery and protein and lipid profiling
- Biolistic particle delivery and nucleic acid profiling

Technologies

Lipid-mediated transfection
siRNA or shRNA design

Electroporation

Biolistic particle delivery

Protein sample preparation

Nucleic acid sample preparation

Related Products



TransFectin™ lipid reagent
siLentFect™ lipid reagent for RNAi
siLentMer™ validated Dicer-substrate siRNA duplexes
Gene Pulser Xcell™ electroporation system
MicroPulser™ electroporator
Gene Pulser®/MicroPulser cuvettes
Helios® gene gun system
PDS-1000/He™ system



ReadyPrep™ 2-D cleanup kit
ReadyPrep protein extraction kit (total protein)
Aurum™ total RNA kits
Quantum Prep® plasmid miniprep kit
AquaPure™ genomic DNA isolation kit

Detection and Analysis

Detection and analysis of nucleic acid and/or proteins

Protein

Automated protein electrophoresis
Protein electrophoresis
Protein blotting
2-D electrophoresis
Microarray analysis
Image analysis

Nucleic Acid

Automated nucleic acid electrophoresis
Nucleic acid electrophoresis
Nucleic acid blotting
Quantitative PCR (qPCR)
Microarray analysis
Image analysis

Profiling and Quantitation

Protein and/or nucleic acid profiling via quantitative and qualitative methods

Protein

Microarray analysis
Multiplex suspension array technology — protein
Protein interaction analysis
Automated protein electrophoresis
Protein electrophoresis
Protein blotting
2-D electrophoresis
Image analysis
Data analysis and bioinformatics

Nucleic Acid

Microarray analysis
Multiplex suspension array technology — nucleic acid
Nucleic acid sequencing
Automated nucleic acid electrophoresis
Nucleic acid electrophoresis
Nucleic acid blotting
Quantitative PCR (qPCR)
Image analysis
Data analysis and bioinformatics

Phenotype

Introducing DNA and RNA into cells is a powerful tool for evaluating gene expression and modulation. From competent cells to gene transfer products to detection and profiling tools, Bio-Rad offers a wide selection of products for gene modulation of bacterial, plant, fungal, and animal cells. For more information, visit us on the Web at www.bio-rad.com/genetransfer/ or at www.bio-rad.com/genomics/



PROTEAN® IEF system
Mini-PROTEAN® Tetra cell
Zeta-Probe® membranes
MiniOpticon™ two-color real-time PCR system
iQ™5 multicolor real-time PCR detection system
Molecular Imager® Gel Doc™ XR system
Experion™ automated electrophoresis system
BioOdyssey™ Calligrapher™ miniarrayer




Trans-Blot® SD semi-dry transfer cell
Bio-Plex® 200 system with HTF
Sequi-Gen® GT system
ProteOn™ XPR36 protein interaction array system
BioOdyssey Calligrapher miniarrayer
MiniOpticon two-color real-time PCR system
iQ5 multicolor real-time PCR detection system

Gene Modulation

Sample > Gene Transfer > Sample Preparation > Detection and Analysis > Profiling and Quantitation > Phenotype

For a complete list of products and related product information, refer to the 2006/2007 catalog, visit us on the Web at www.bio-rad.com, or contact your local Bio-Rad representative.

Ordering Information

Catalog #	Description	Catalog #	Description
Gene Transfer			
170-3351	TransFectin Lipid Reagent , 1.0 ml	700-7000	Experion System , for protein analysis (analysis kits sold separately)
170-3360	siLentFect Lipid Reagent for RNAi , 0.5 ml	700-7001	Experion System , 100–120 V, for RNA analysis (analysis kits sold separately)
Varies	siLentMer Validated Dicer-Substrate siRNA Duplexes , 2 nmol, designed with proven criteria and functionally tested for ≥85% silencing	700-7002	Experion System , 220–240 V, for RNA analysis (analysis kits sold separately)
Varies	siLentMer Predesigned Dicer-Substrate siRNA Duplexes , 2 nmol, designed with proven criteria	169-2000	BioOdyssey Calligrapher MiniArrayer , 115 V
174-9950	siLentMer Delivery Optimization Kit , includes 1.0 nmol fluorescently labeled siLentMer nonsilencing siRNA, 0.2 ml siLentFect lipid reagent, 1.0 ml siLentMer siRNA resuspension buffer	169-2100	BioOdyssey Calligrapher MiniArrayer , 230 V
Varies	siLentMer Total Control Kits	169-2200	BioOdyssey Calligrapher MiniArrayer With Cooling Module , 115 V
165-2660	Gene Pulser Xcell Total System , for mammalian and microbial cells	169-2300	BioOdyssey Calligrapher MiniArrayer With Cooling Module , 230 V
165-2100	MicroPulser Electroporator	Profiling and Quantitation	
165-2088	Gene Pulser/MicroPulser Cuvettes , 0.4 cm gap, 50	170-3940	Trans-Blot SD Semi-Dry Electrophoretic Transfer Cell
165-2431	Helios Gene Gun System , 100/120 V	171-000201	Bio-Plex 200 System
165-2432	Helios Gene Gun System , 220/240 V	171-000205	Bio-Plex 200 System With HTF , includes high-throughput fluidics (HTF)
165-2257	PDS-1000/He System	176-0100	ProteOn XPR36 Protein Interaction Array System
Sample Preparation			
163-2130	ReadyPrep 2-D Cleanup Kit , 50 preps	Varies	ReadyStrip™ IPG Strips
163-2086	ReadyPrep Protein Extraction Kit (Total Protein) , 20 preps	Varies	Criterion™ Precast Gels
732-6800	Aurum Total RNA 96 Kit , 2 x 96-well preps	164-5050	PowerPac Basic Power Supply
732-6100	Quantum Prep Plasmid Miniprep Kit , 100 preps	165-3860	Sequi-Gen GT System , 21 x 40 cm
732-6340	AquaPure Genomic DNA Isolation Kit , for cultured cells and gram-negative bacteria	165-3861	Sequi-Gen GT System , 21 x 50 cm
732-6343	AquaPure Genomic DNA Tissue Kit , for animal and plant tissues, cultured cells, and gram-negative bacteria	165-3862	Sequi-Gen GT System , 38 x 30 cm
Detection and Analysis			
165-4000	PROTEAN IEF System , 90–240 VAC	165-3863	Sequi-Gen GT System , 38 x 50 cm
165-8000	Mini-PROTEAN Tetra Cell , 10-well, 0.75 mm thickness; 4-gel system	170-9300	FPQuest™ Software
170-3930	Mini Trans-Blot Electrophoretic Transfer Cell	Varies	InfoQuest™ FP Software
Varies	Zeta-Probe® GT Membranes	siLentMer products are manufactured by Integrated DNA Technologies, Inc. (IDT) and are for research use only. For custom siRNA synthesis, contact IDT.	
Varies	Zeta-Probe Membranes	Biolytic technology is covered by patents owned by E.I. du Pont de Nemours and Co. The technology is exclusively licensed to Bio-Rad Laboratories, Inc.	
CFB-3120	MiniOpticon Real-Time PCR System , includes optical housing, MJ Mini™ thermal cycler, analysis software	Bio-Rad's real-time thermal cyclers are licensed real-time thermal cyclers under Applera's United States Patent No. 6,814,934 B1 for use in research and for all other fields except the fields of human diagnostics and veterinary diagnostics.	
CFD-3121	MiniOpticon Real-Time PCR Detector , for MJ Mini cycler upgrade	Certain arrays and/or the method of preparation, analysis, or use may be covered by patents or other intellectual property rights owned by third parties.	
170-9780	iQ5 Multicolor Real-Time PCR Detection System , includes iCycler base, optics module, software CD-ROM, 5 installed filter sets, 96-well reaction module, calibration solutions, optical-quality 96-well PCR plates, Microseal 'B' seals, communication cables, power cord, quick reference cards, instructions	 LabChip and the LabChip logo are trademarks of Caliper Life Sciences, Inc. Bio-Rad Laboratories, Inc. is licensed by Caliper Life Sciences, Inc. to sell products using the LabChip technology for research use only.	
170-8170	Molecular Imager Gel Doc XR System , PC, includes Quantity One software	The Bio-Plex suspension array system includes fluorescently labeled microspheres and instrumentation licensed to Bio-Rad Laboratories, Inc. by the Luminex Corporation.	
170-8171	Molecular Imager Gel Doc XR System , Mac, includes Quantity One software		

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